

ABSTRACT OF THE DISCLOSURE

The present invention relates to virulent (lytic) *Listeria monocytogenes* phage
5 from the Myoviridae family, preferably P100, alone or in combination with other
virulent phages. P100 and the endolysin from P100 can be administered to food
products, to the components that will be added to food products, and/or to the
infrastructure of the food processing plants within which such food products are
10 processed, or the containers or wraps in which such foods are stored and/or shipped,
in order to reduce *Listeria monocytogenes* contamination. P100 can also be used in
the present invention to identify *Listeria monocytogenes* bacteria present on (or
within) foodstuffs, as well as those *Listeria monocytogenes* bacteria present in the
equipment or the general environment of the food processing plants in which the
foodstuffs are being processed and in animals infected with *Listeria monocytogenes*.
15 The phage and the endolysin of the present invention can also be used to treat animals
infected with *Listeria monocytogenes*. P100 will kill the bacteria that are within its
host range with great efficiency and will propagate to high titer thereon. P100 can be
combined with other lytic phage, and/or with other antimicrobial agents to reduce or
eliminate *Listeria*.

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